The CT Scanner That Solves More Than Imaging

Empowering Imaging Teams. Elevating Patient Care.



Demand And Short Supply

Health care organizations are using temporary staffing and other strategies aimed at finding and retaining employees

BY JENNIE MCKEE October 24, 2024



A recent survey from the American Society of Radiologic Technologists (ASRT) found a radiology technologist vacancy rate of 18.1%, a dramatic increase from 6.2% only three years ago.

The shortage is having a significant impact on radiology practices and on patients' wait time to schedule and undergo imaging.

For inpatients, increased wait times can lead to delayed discharges and longer hospital stays.

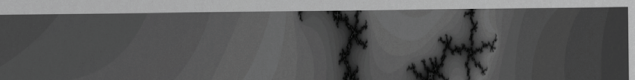
"Delays in initial screenings cause delays in follow-up care, such as additional imaging, biopsies and consultations with specialists," said Yan

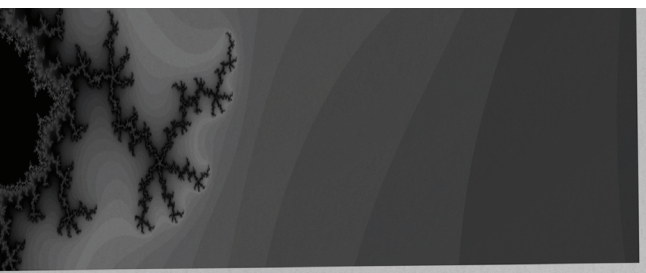
versity of Nottingham's
is can negatively affect
s during the waiting

ng cancer screening,

essentialresearch

iences Workplace and Staffing Survey





ritten permission from publisher.

asrt

merican Society of Radiologic Technologists

Radiology techs in especially high demand as 85% of hospitals seek 'allied' health workers

Dave Pearson | October 22, 2022 | Radiology Business | Staffing



More than four-fifths of healthcare provider organizations are shorthanded of all

Innovate Healthcare RADIOLOGY

FOR IMAGING LEADERS IMPROVING ECONOM

MANAGEMENT IMAGING TECHNOLOGY VIDEOS CONFERENCES CUSTOM CO

Radiology techs in especially high demand as 85% of 'allied' health workers

Dave Pearson | October 22, 2022 | Radiology Business | Staffing

Education and CME Membership Advocacy Data Science and Informatics

> Facing staffing shortages, our team felt significant pressure. Despite our efforts, finding an effective solution proved challenging.†
>
> — **Tonya Altmann**
> BSRT (R)
> Diagnostic Imaging Manager
> Door County Medical Center

American College of Radiology

Bulletin

NEWS AND ANALYSIS SHAPING THE FUTURE OF RADIOLOGY

ill We Solve Our Radiology Workforce Shortage?

March 1, 2024 Read time: 4 min

ELSEVIER

Journal of Medical Imaging and Radiatic Sciences

Volume 55, Issue 4, December 2024, 101333

Commentary

The shortage of radiographers: A global crisis in healthcare

eanthis Konstantinidis

A Nationwide RT Shortage is Amplified

The radiologic technologist shortage has reached historic levels across the US. For example, the vacancy rate for CT Technologists has doubled in just 2 years.

- Burnout and retirement are accelerating exits from the field
- Fewer students are entering imaging programs

The 2024 Consensus Committee consisting of the industry's leading organizations (ARRT, ASRT, and JRCERT), called it a "perfect storm" of aging patients, staffing shortfalls, and burned-out teams. If hospitals can't keep pace, patient care and revenue will suffer.[1]

When technologist roles go unfilled:

- Overtime soars, leading to fatigue and frustration, driving operational costs up
- Scheduling delays impact patient access and throughput
- Morale declines, turnover increases, and the cycle repeats
- Declining employee and patient satisfaction
- Cross-modality bottlenecks

65%

of Radiology departments experienced Radiologic technologist turnover[2]

↑10.7%

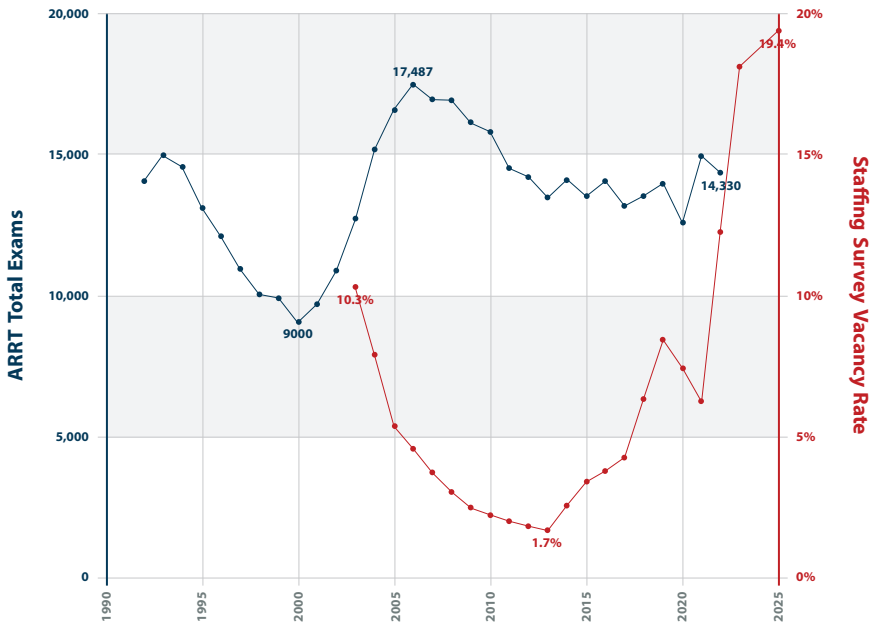
CT vacancy rates rose from 8.7% in 2021 to 19.4% in 2025[2] The highest vacancy rate for any discipline in this survey

Supply and Demand (Radiography)

Total number of radiography certification exam takers compared with the job vacancy rate for radiographers over time.[1]

↓18%

Radiographer certification exam participation has fallen 18% since 2006[1]



Staffing Shortages and Burnout Were Significant Concerns at Door County Medical Center

> Our Diagnostic Imaging team upheld a high standard of care even during the staffing shortages, but open shifts took a toll on morale.†
>
> — **Tonya Altmann, BSRT (R)**
> Diagnostic Imaging Manager
> Door County Medical Center

In Door County, Wisconsin, the CT scanner never sleeps. Door County Medical Center (DCMC) is a 25-bed critical access hospital in rural Wisconsin with the only emergency department in the area, serving Door and Kewaunee counties, delivering imaging services 24/7/365. As the only ER in the area and a magnet for tourists, military personnel, and retirees, the demand for CT is relentless, averaging over 7000 CT exams a year while operating with only one CT scanner.

- The region's aging and growing population is increasing demand for imaging.
- Summer tourism and extended hours strain staffing amid a national CT technologist shortage.
- Ongoing shortages disrupted patient flow, increased overtime, and affected morale.

There are not enough technologists to meet growing demand across the country creating a significant challenge for diagnostic imaging departments like DCMC. Leaders must continually optimize workflows and innovate to address these pressures.



CANON'S SOLUTION: INSTINX

The INSTINX workflow experience transforms how imaging teams work by driving operational efficiencies with intuitive AI technologies for optimized high-quality imaging.

Featuring automated protocol setup and scanner workflow, remote scan support, and zero-click post-processing, AI-assisted workflows offer an easy-to-learn user interface for cross-training staff from other modalities.

> Canon's 3D Landmark Scan is truly a game-changer. As a technologist cross-training in this field, it gives me the reassurance and confidence I need to feel comfortable developing my new skills.†
>
> — **Patience**
> (MR cross trained tech)

Built-in Flexibility for Smart Staffing

- Auto-processing and AI tools reduce scan complexity
- Cross-trained staff can perform routine CTs
- Dramatic reduction in turnaround for trauma and urgent cases

Radiologist-Driven Protocols

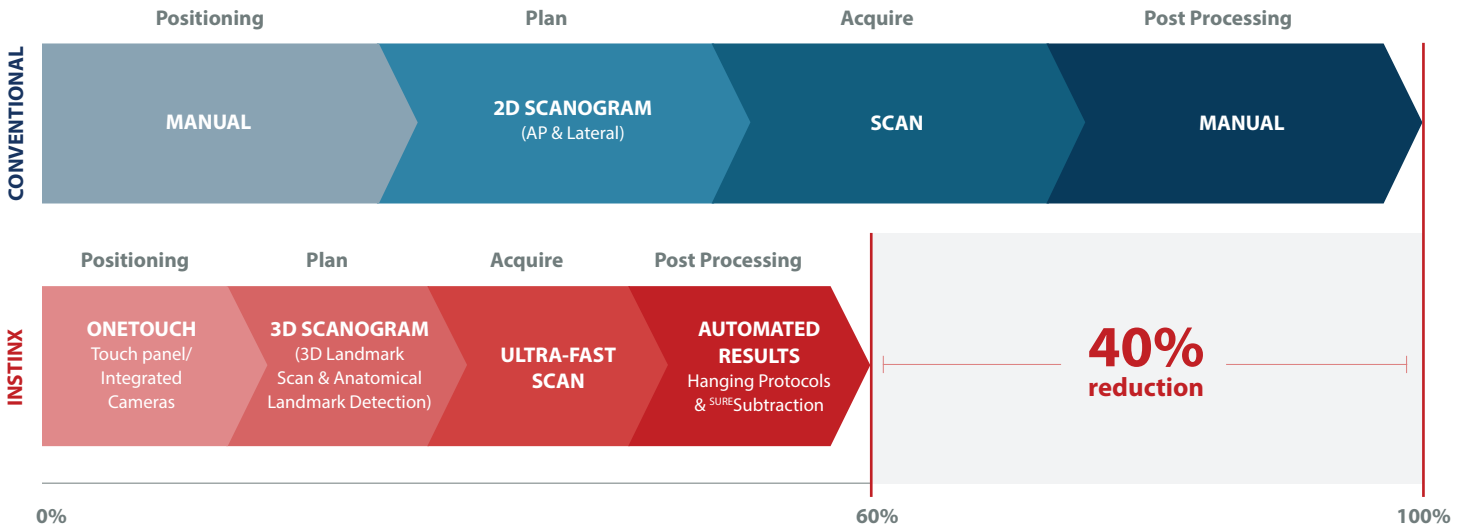
- Protocols guide technologists from setup to post-processing
- Real-time flexibility to adjust protocols to meet patient needs
- Real-time image review during scanning can reduce judgment calls ensuring scan consistency

Advanced Technology that Empowers Techs

- Ultra-low-dose, clear images, even on large patients
- 3D Landmark scans reduce rescans and radiation by providing technologists with an overview of the patient's anatomy

40% Reduction in Workflow Steps with INSTINX

Removes steps throughout each phase of the imaging chain for more optimized workflows.



Efficiency Meets Intelligence

Canon CT Scanners are designed to meet your clinical needs, offering superior performance with high-quality, low-dose imaging, from routine to complex exams.

With INSTINX, CT exams are easier and faster while driving efficiency with a highly intuitive user experience for consistent results across operators.



Canon Suite of CT Scanners with INSTINX



Aquilion ONE INSIGHT Edition | Aquilion Serve SP | Aquilion Serve

Driving Efficiency with INSTINX

Intuitive, intelligent and easy to learn workflow automation that drives operational consistency and efficiency.



40%

reduction in workflow steps



97%

accuracy in automatic scan range planning with 3D Landmark Scan[8]



24%

reduction in time for scan planning with Anatomical Landmark Detection (ALD)[7]



More consistent scan planning between technologists and reduction in the number of clicks with ALD[7]

Results: A Transformed Team And Patient Experience

Door County Medical Center selected the Aquilion Serve SP and since then has thrived with a reduced overtime call burden for on-call CT technologists driving increased employee satisfaction and retention. The user-friendly design and enhanced workflow support of the Canon CT attracted significant interest from technologists, leading to increased requests for CT cross-training, boosted staff confidence, and improved department morale. As a result, more team members became CT-trained, reducing the demand of on-call team members during nights and weekends, accelerating the patient order-to-exam process, and ultimately improving the patient experience.

After installing the new Aqulion Serve SP, CT overtime call reduced by

↓41%†

Increased technologist interest and confidence after cross-training to CT due to its ease of use.

Faster Exams, Expanded Services, Happier Patients

- Exams are faster and more comfortable.
- The Aquilion Serve SP has expanded Door County's outpatient access, allowing specialized procedures like virtual colonoscopy, calcium scoring, and radiation therapy planning.
- Canon's gantry touchscreen lets technologists stay in the exam room during setup, reducing patient anxiety and improving the overall experience.
- The countdown timers keep patients informed throughout their scan, helping them feel relaxed and at ease.

*Centers for Medicare & Medicaid Services (CMS)
**CMS Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

Door County Medical Center earns Elite Dual Recognition from CMS and the Diagnostic Diagnostic Imaging Department 5-star PRC award for Excellence in Healthcare



Awarded 2025 5-star rating by CMS* for Overall Hospital Quality



Awarded 2025 CMS HCAHPS 5-star rating for Patient Experience**



5-star PRC award for Diagnostic Imaging Department

The Canon Commitment

Door County Medical Center's decision to invest in a Canon CT aligns with their commitment to provide exceptional healthcare services to the community with state-of-the-art imaging technology and the added bonus of reducing technologists burnout while helping to solve the staffing shortage.

At Canon, we seek to address this challenge across all our solutions. We design, build, and deliver technologies to enable our customers to meet their department goals. This commitment ensures our scanners are not just a tool for current diagnostic needs but a gateway to embracing the next generation of medical imaging. This flexibility is critical in a rapidly evolving field in which staying up to date with the latest technology directly impacts the quality of patient care and the hospital's competitive edge.



"People used to dread call. Now they ask for extra call shifts. That's the difference...We're not just managing, we're thriving... This isn't just a job, it's a calling. The Aquilion Serve SP lets us answer that call.†

— **Tonya Altmann, BSRT (R)**
Diagnostic Imaging Manager
Door County Medical Center

References

1. "Mapping the Future of Medical Imaging and Radiation Therapy: White Paper on the 2024 Consensus Committee Meeting Outcomes." www.ASRT.org. American Society of Radiologic Technologists, Accessed June 10, 2025. https://www.asrt.org/docs/default-source/research/whitepapers/2024-consensus-committee-on-the-future-of-medical-imaging-and-radiation-therapy.pdf?sfvrsn=1f869819_16.
2. 2025 Radiologic Sciences Workplace and Staffing Survey." www.ASRT.org. American Society of Radiologic Technologists, Accessed September 18, 2025.
3. "The Shortage of Radiographers: A Global Crisis in Healthcare." Journal of Medical Imaging and Radiation Sciences 55, no. 4 (2024). Accessed June 10, 2025.
4. "Radiology Technologists Are in High Demand And Short Supply." RSNA News. Radiological Society of North America, October 24, 2024. https://www.rsna.org/news/2024/october/radiologic-technologist-shortage.
5. "How Will We Solve Our Radiology Workforce Shortage." Bulletin News and Analysis Shaping the Furture of Radiology. American College of Radiology, March 1, 2024. https://www.acr.org/clinical-resources/publications-and-research/acr-bulletin/How-Will-We-Solve-Our-Radiology-Workforce-Shortage.
6. "Radiology Techs in Especially High Demand as 85% of Hospitals Seek 'allied' Health Workers." Radiology Business for Imaging Leaders Improving Econonics, Operations and Outcomes. Innovate Healthcare, October 22, 2022. https://radiologybusiness.com/topics/healthcare-management/healthcare-staffing/radiology-techs-especially-high-demand-85.
7. Based on a study performed at Hakujyuji Hospital, Japan with 40 cases, 10 technologists comparing manual scan planning on Aquilion ONE with automatic scan planning on Serve for body examinations.
8. Based on an ALD evaluation of 240 3D Landmark scans (40 Head, 200 Body) 3D landmark scan data. Cases in which the relevant anatomic landmark(s) were not present (9) were excluded. 97% accuracy is based on results within +/- 1 cm of target start, end, and FOV position, confirmed by two experienced CT Technologists.

† The clinical results, performance and views described are the experience of the clinicians. Results may vary due to clinical setting, patient presentation and other factors.

Canon

CANON INC.

3-30-2, Shimomaruko, Ota-ku, Tokyo 146-8501, Japan
https://global.medical.canon

©CANON INC. 2026. All rights reserved.
Design and specifications are subject to change without notice.

Model number: TSX-307B
MOICT0156EA 2026-09 Published in Japan

The purpose of this paper is to provide medical information related to imaging technology using our systems to healthcare professionals.
Please note that this is not intended to provide information to the general public.

CANON MEDICAL GROUP

Made For life